

5/21/98

IN THE CLAIMS:

The following is a complete listing of the claims in this application, reflects all changes currently being made to the claims, and replaces all earlier versions and all earlier listings of the claims:

Claim 1 (currently amended): An information processing apparatus

comprising:

a common ~~printer driver~~ processing module for providing a common image processing for a printer connected to said information processing apparatus irrespective of the type of the connected printer;

a plurality of individual ~~printer driver~~ processing modules each providing a different image processing for a printer connected to said information processing apparatus depending on the type of the connected printer; and

means for switching said plurality of individual ~~printer driver~~ processing modules in accordance with the type of the connected printer and outputting information processed by the switched module to the connected printer.

Claim 2 (currently amended): An information processing apparatus

comprising:

a common ~~printer driver~~ processing module for providing a common image processing for a printer connected to said information processing apparatus irrespective of the type of the connected printer;

a plurality of individual ~~printer driver~~ processing modules each

providing a different image processing for a printer connected to said information processing apparatus depending on the type of the connected printer; and

means for switching said plurality of individual ~~printer driver~~ processing modules in accordance with information indicating the type of the connected printer obtained from the printer and outputting information processed by the switched module to the connected printer.

Claim 3 (previously presented): An apparatus according to claim 1, wherein said modules are modules to form emission data for a waterproof reinforcement agent.

Claim 4 (previously presented): An apparatus according to claim 1, wherein said modules are modules for offset transmitting the information in accordance with a head of the output apparatus.

Claim 5 (original): An apparatus according to claim 1, wherein the switching of said modules is executed when a driver program is installed.

Claim 6 (original): An apparatus according to claim 1, wherein the switching of said modules is executed when an image is outputted to the output apparatus.

Claim 7 (currently amended): An apparatus according to claim 1, wherein said individual ~~printer driver~~ processing modules are for use in forming predetermined information,

and wherein the predetermined image information is quantized information.

Claim 8 (original): An apparatus according to claim 7, wherein the quantized information includes binarized information.

Claims 9 and 10 (canceled)

Claim 11 (currently amended): A data processing method of using a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer, and a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer, comprising the steps of:

switching the plurality of individual ~~printer driver~~ processing modules in accordance with the type of the connected printer; and

outputting information processed by the switched module to the connected printer.

Claim 12 (currently amended): A data processing method of a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer and a plurality of individual ~~printer driver~~ processing modules for each providing a different image processing for a connected printer depending on the type of the connected printer, comprising the steps of:

switching the plurality of individual ~~printer driver~~ processing modules
in accordance with information indicating the type of the connected printer obtained from the
connected printer; and
outputting information processed by the switched module to the
connected printer.

Claim 13 (previously presented): A method according to claim 11, wherein the
modules are modules to form emission data for a waterproof reinforcement agent.

B/ Claim 14 (previously presented): A method according to claim 11, wherein the
modules are modules for offset transmitting the information in accordance with a head of the
output apparatus.

Claim 15 (previously presented): A method according to claim 11, wherein the
switching of the modules is executed when a driver program is installed.


Claim 16 (previously presented): A method according to claim 11, wherein the
switching of the modules is executed when an image is outputted to the output apparatus.

Claim 17 (currently amended): A method according to claim 11, wherein the
individual ~~printer driver~~ processing modules are for use in forming predetermined information,
and wherein the predetermined image information is quantized information.

Claim 18 (previously presented): A method according to claim 17, wherein the quantized information includes binarized information.

Claim 19 (canceled)

Claim 20 (previously presented): A method according to claim 11, wherein the connected printer is an ink jet printer.

 Claim 21 (previously presented): An information processing system comprising an information processing apparatus according to Claim 1 and the connected printer.

Claim 22 (currently amended): A computer readable memory medium in which a program using a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer, and a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer, wherein said program comprises the steps of:

switching the plurality of individual ~~printer driver~~ processing modules in accordance with information indicating the type of the connected printer obtained from the connected printer; and

outputting information processed by the switched module to the connected printer.

Claim 23 (currently amended): A computer readable memory medium in which a program using a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer and a plurality of individual ~~printer driver~~ processing modules for each providing a different image processing for a connected printer depending on the type of the connected printer, wherein said program comprises the steps of:

switching the plurality of individual ~~printer driver~~ processing modules in accordance with information indicating the type of the connected printer obtained from the connected printer; and

outputting information processed by the switched module to the connected printer.

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Claim 24 (currently amended): A medium according to claim 22, wherein said ~~program~~ processing modules ~~are program modules to~~ form emission data for a waterproof reinforcement agent.


Claim 25 (currently amended): A medium according to claim 22, wherein said ~~program~~ processing modules ~~are program modules for~~ offset transmitting the information in accordance with a head of the output apparatus.

Claim 26 (currently amended): A medium according to claim 22, wherein the switching of said ~~program~~ processing modules is executed when a driver program is installed.

Claim 27 (currently amended): A medium according to claim 22, wherein the switching of said ~~program~~ processing modules is executed when an image is outputted to the connected printer.

Claim 28 (currently amended): A medium according to claim 22, wherein said individual ~~printer driver~~ processing modules are for use in forming predetermined information, and wherein the predetermined image information is quantized information.

Claim 29 (previously presented): A medium according to claim 28, wherein the quantized information includes binarized information.

 Claim 30 (canceled)

Claim 31 (currently amended): An information processing apparatus comprising:

memory means storing a common ~~printer~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer and a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer depending on the type of the connected printer; and

executing means for executing the ~~printer driver~~ processing program stored in said memory means.

Claim 32 (currently amended): An apparatus according to claim 31, wherein said individual printer processing modules each include a module for forming pattern data for a waterproof reinforcement agent on the basis of the image data formed by said common printer module and transmitting the formed pattern data for the waterproof reinforcement agent and the image data to the printer.

Claim 33 (currently amended): An apparatus according to claim 31, wherein said individual printer processing modules each include for offset transmitting the image data formed by said common printer processing module in accordance with a head in which recording elements as many as a plurality of colors are arranged in a paper feeding direction of the connected printer.

Claim 34 (currently amended): An apparatus according to claim 33, wherein said individual printer processing modules each include a control module for controlling the offset transmission when data for a longitudinal paper is printed by the connected printer.

Claim 35 (original): An apparatus according to claim 34, wherein said control module includes a module for setting a raster position of a reference color to "0" at a timing of a new page of the reference color and setting raster positions of the other colors to minus values.

Claim 36 (currently amended): A method of forming a printer driver processing program, comprising the steps of:

forming a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer; and

forming a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer depending on the type of the connected printer.

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Claim 37 (currently amended): A method according to claim 36, wherein the individual ~~printer~~ processing modules each include modules for forming pattern data for a waterproof reinforcement agent on the basis of the image data formed by the common ~~printer~~ processing module and transmitting the formed pattern data for the waterproof reinforcement agent and the image data to the connected printer.

Claim 38 (currently amended): A method according to claim 36, wherein the individual ~~printer~~ processing modules each include a module for offset transmitting the image data formed by the common ~~printer~~ processing module in accordance with a head in which recording elements as many as a plurality of colors are arranged in a paper feeding direction of the connected printer.

Claim 39 (currently amended): A method according to claim 38, wherein the individual ~~printer~~ processing modules each include a control module for controlling the offset transmission when data for a longitudinal paper is printed by the connected printer.

Claim 40 (original): A method according to claim 39, wherein said control module includes a module for setting a raster position of a reference color to "0" at a timing of a new page of the reference color and setting raster positions of the other colors to minus values.

Claim 41 (currently amended): A memory medium in which a ~~printer driver~~ processing program which is executed by a computer is stored, wherein said program comprises:

a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer; and

a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer depending on the type of the connected printer.

Claim 42 (currently amended): A medium according to claim 41, wherein said individual ~~printer~~ processing modules each include a module for forming pattern data for a waterproof reinforcement agent on the basis of the image data formed by said common ~~printer~~ processing module and transmitting said formed pattern data for the waterproof reinforcement agent and said image data to the printer.

Claim 43 (currently amended): A medium according to claim 41, wherein said ~~the~~ individual ~~printer~~ processing modules each include a module for offset transmitting the image data formed by said first module in accordance with a head in which recording elements as many as a plurality of colors are arranged in a paper feeding direction of the printer.

Claim 44 (currently amended): A medium according to claim 43, wherein said the individual printer processing modules each include a control module for controlling the offset transmission when data for a longitudinal paper is printed by the printer.

Claim 45 (original): A medium according to claim 44, wherein said control module includes a module for setting a raster position of a reference color to "0" at a timing of a new page of the reference color and setting raster positions of the other colors to minus values.

Claim 46 (original): An apparatus according to claim 31, wherein said processes include a working process or a transmitting process.

Claim 47 (original): A method according to claim 36, wherein said processes include a working process or a transmitting process.

Claim 48 (original): A method according to claim 41, wherein said processes include a working process or a transmitting process.

Claim 49 (currently amended): An apparatus according to claim 31, further comprising printing means for printing on the basis of the print data which is outputted from said printer processing modules.

Claim 50 (original): An apparatus according to claim 49, wherein said printing

means includes an ink jet printer.

Claim 51 (currently amended): A program product, including a program using a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer, and a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer, wherein said program comprises the steps of:

switching the plurality of individual ~~printer driver~~ processing modules in accordance with information indicating the type of the connected printer obtained from the connected printer; and

outputting information processed by the switched module to the connected printer.

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Claim 52 (currently amended): A program product including a program using a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer and a plurality of individual ~~printer driver~~ processing modules for each providing a different image processing for a connected printer depending on the type of the connected printer, wherein said program comprises the steps of:

switching the plurality of individual ~~printer driver~~ processing modules in accordance with information indicating the type of the connected printer obtained from the connected printer; and

outputting information processed by the switched module to the connected printer.

Claim 53 (currently amended): A program product including a ~~printer driver~~ processing program which is executed by a computer, wherein said program comprises:

a common ~~printer driver~~ processing module for providing a common image processing for a connected printer irrespective of the type of the connected printer; and

a plurality of individual ~~printer driver~~ processing modules each for providing a different image processing for a connected printer depending on the type of the connected printer.
